APPENDIX E

MISSOURI GRADE LEVEL EXPECTATIONS

Assessment Committee

Analysis of Reading Assessment Measures Coding Form

February, 2002

Form © Institute for the Development of Educational Achievement College of Education, University of Oregon

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Form completed by: Dr. Irene McAfee

	Level I Review: Ba	asic Inf	formation
. MEASU	RE		
Na	me: Developmental Reading Assessment K-3		
De	eveloper(s): Joetta Beaver in collaboration with prim	nary clas	assroom teachers
Pu	blisher: Celebration Press	R	Reviewer: Dr. Irene McAfee
Pu	blication Date: 2001		
	ources were used for the completion of this asso echnical Reports, and the instrument itself.	essmen	ent including the Technical Manual, the Teachers Reso
DESCR	IPTIVE INFORMATION OF INSTRUMENT		
	1, 2, and/or 3. (Check all that apply)	X First C	ergarten X Third Grade Grade Degrade Beyond Third Grade ond Grade
		□ 4 X 5	X 6 X 8 □ Beyond 9 X 7 X 9
2.	The instrument assesses one or more of the follow Phonemic Awareness: Initial Sound Blending Segmenting Invented Spelling Letter Names Timed Untimed Letter Sounds Timed Untimed Word Attack Nonsense Words Timed Untimed Word Identification	X	 ✓ Listening Comprehension ✓ Reading Comprehension X Oral □ Cloze □ Maze X Silent X Retell X Question/Answer X Other: Literal and Inferential Comprehension on Fiction and Non-Fiction texts □ Vocabulary List Specific Skills or Subtests X Oral Accuracy Rate X Reading Comprehension
Х	□ Regular □ Irregular Reading Fluency X Words X Sentences X Connected Text		

NOTES:

B. DESCRIPTIVE INFORMATION OF INSTRUMENT

3. The	instrument provides the following	ng type(s) of informa	ition: (Check all that apply)	
X	Screening		X Possibly	
X	Diagnostic		X Possibly	
X	Progress Monitoring	X Definitely		
X	Outcome	X Definitely		
<u>Definit</u>	tions of Types of Assessments			
develo		ing of the school year	eading skills strongly predictive of future rea with all children in grades K, 1, 2, and 3 to	
	ostic Measure: Assessment condu ths and weaknesses is needed to gu		the school year when more in-depth analy	sis of a student's
monthl who ar compa instruc Outco	y, or quarterly) using comparable ar re not demonstrating adequate progr re the efficacy of different forms of i tional programs for those at-risk lear	nd multiple test forms to ress and therefore requestruction for strugglin rners.	num of three times a year or on a routine book (a) estimate rates of reading improvemenuire additional or different forms of and instructional or different forms of and instructional or different forms of and instructional or different forms of and thereby design more effective tudents in terms of whether or not they ach	t, (b) identify children ruction and / or (c) e, individualized
·	e instrument provides information	n on student		
	mance in English and/or Spanis		English X Spanish	
Notes):			
C. DESCRIPT	IVE INFORMATION OF NO	RMATIVE SAMP	LE	
1a. Cl	neck type of test: Normative	X <u>Criterior</u>	-referenced	
1b. Cl	naracteristics of the normative sa	ample. Nati	onal representation? ☐ Yes	□ No
Date:		Num	ber of States:	
Size:		Reg	ons:	
Gende	er (Percent)	!	Male FemaleUnkno	own
SES (Percent, check all reported)			
	_Low		Parents did not graduate high scho	ol
	_Middle		Parents graduated high school	
	_High		Parents had 1-3 years of college	
Othor	SES Indicators:		Parents had 4 or more years of coll	ege
	city (Percent)			
Lunne	only (i ercent)		Latino/HispanicNot La	atino/ Hispanic
Race	(Percent)		Asian Black	, African American
				s Islander
			White Other	
			Unknown	
Notes:				

Level II Review: Development and Administration

A. TIME, ADMINISTRATION, AND FREQUENCY

Assessment format:	X <u>individual only</u> D both ex	☐ group or individually
If group, administration time:		minutes
Individual scoring and administration time (minutes): Scoring time is: provided X estimated Administration time is: provided X estimated	Test Name DRA K-3 The DRA is not a S	Scoring Time 10 – 20 min AdministrationTime 10 – 20 min. peed test.
Discontinue Rules?	X yes □ basals	☐ no☐ ceilings ☐ other
Alternate forms available?	□ no	X yes Total # of comparable forms: 2

NOTES: <u>Discontinue Rules</u> are described in the DRA Observation Guide, the DRA Teacher Resource Guide, and in the Technical Manual. For example, on Level A, page 2 of the Observation Guide, it states: *If a student reads Level A* (Emergent Reader) at 90% accuracy or above, continue with Level 1. *If the student reads below 90% accuracy, check the statements below and follow the suggestions found on page 39 of the DRA Teacher Resource Guide.* The statements "below ", then, are <u>Observations of Reading Behaviors</u> on Directionality, On–to–One Matching, Monitoring, Concepts of Letters and Words, and Use of Cue Sources.

Other discontinue rules apply to students reading at higher levels. For example, if a student is reading at an accuracy level of 94% but does not have adequate comprehension (based on a 4-point rubric), or moderate fluency (based on teacher ratings in 4 areas: phrasing and fluency, intonation, problem solving strategies, and analysis of miscues and self-corrections), then the test administrator should try a lower text level......

In general, the Teacher Guide devotes considerable attention to sensitizing the test administrator to observable student behaviors that point to the need to discontinue the use of one assessment text and introduce another at a lower reading level.

Alternate Forms of the assessment texts were developed for occasions when a student "did not progress enough to move up a level, but the teacher needed to assess again." Extensive field testing was done to assess the comparability of the alternate assessment texts to the "original" texts, detailed in a study by E. Jane Williams, Ph.D., Alternative Developmental Reading Assessment, October, 2000. In this study, 157 teachers in 39 districts within the United States and two Canadian Provinces, administered the texts to 208 kindergarten, first, second, and third grade students.

B. TRAINING

Time required for training teacher or other professional responsible for administration: Qualifications of the examiner:	X	less than 1 hour of training 1-4 hours of training 4-8 hours of training time stated time estimated professional
		paraprofessional information not available
NOTES: Three training options are explained in the Teache training option offered requires 3 to 4 hours with a consulta of three hours and include the review of assessment conferdiscussion of a conference by the test author. The third an Institute, which is typically scheduled for a three-day period.	int. A ences id mo	Another option entails the watching of 2 videos for a total s at each stage of reading development and a
C. SCORING STRUCTURE		
Types of scores available:	X	
	X	subscale / subtest scores X composite score error analysis Other (specify): percent, Independent Reading vel; Stage of reading Development
Basis for calculating standard & percentile	Not	t Applicable/Not a Norm-Referenced Assessment
scores:		age norms grade norms stanines Grade norms normal curve equivalents

Scoring Structure (specify how raw scores are calculated and what comprises cluster/composite score):

Accuracy Rate is the percentage of words read correctly. During the oral reading, the teacher records student miscues, including substitutions, omissions and insertions, as well as repetitions, and self-corrections. The teacher counts the number of miscues that are not self-corrected. The teacher also notes errors each time the student makes them (except for proper nouns, which teachers only count once). Using a chart in the Teacher Observation Guide, the teacher identifies the accuracy rate that corresponds to the number of uncorrected miscues or simply calculates it by dividing the number of miscues by the total word count (provided on the Observation Guide), multiplying that number by 100 and then subtracting that number from 100. For example, an accuracy rate of 96% occurs when a student reads with 2 miscues in a 53 word-count text (100% - (2/53 * 100%) = 96%. The precalculations of the accuracy rates on the Observation Guide minimizes the potential for error in the calculation and supports the scoring process in a way that is teacher-friendly.

Fluency Level describes the student's oral reading behaviors in terms of phrasing and fluency, intonation, problem-solving strategies and teacher miscue analysis or student self-analysis of miscues and self-corrections. Fluency is not calculated until end of 1st grade. Each of these components of Fluency is rated on a Likert-Type continuum. The Phrasing and Intonation continua are on a 6-point scale. Problem-Solving Strategies uses an 8-point scale with additional information noted on the amount of teacher assistance given. Analysis of Miscues uses a 4-point scale for teacher analysis and a 6-point scale for Student Self-Analysis.

Comprehension Level describes the student's ability to retell the text including the main idea, key facts, and characters of topics. The teacher also evaluates the student's level of interpretation of the story, and the extent of questions and prompts that the teacher has to provide. The teacher then uses the Comprehension Rubric provided in the Observation Guide to score the student's Level of Comprehension.

The Comprehension Rubric is a 4×6 point matrix. The horizontal 4-point scale ranges from "Very Little Comprehension" to Very Good Comprehension". Under each of these 4 points, there are 6 scorable features. Each of the 6 features observed receives 1-point, if that feature is listed under "Very Little Comprehension", 2-points, if under "Some Comprehension", 3-points, if under "Adequate Comprehension" and 4-points, if under "Very Good Comprehension". All of the points can then be summed across the matrix to reach a total of 6 to 24 points. The total number of points, then, identifies the Comprehension Category: "Very Little Comprehension" – 6 to 9 points; "Some Comprehension" – 10 to 15 points; "adequate Comprehension" – 16 to 21 points; and "Very Good Comprehension" – 22 to 24 points.

Comprehension Rubric	Very Little Comprehension (6-9 points)	Some Comprehension (10 –15 points)	Adequate Comprehension (16 to 21 points)	Very Good Comprehension (22 –24 points)
Key Facts	1 - Tells 1 or 2 events or key facts	2 - Tells some of the evens or key facts	3 - Tells many events, in sequence for the most part, or tells many key facts (3 points)	4 - Tells most events in sequence or tells most key facts (4 points)
Details	1 - Includes few or no important details from text	2 - Includes some important details from text	3 - Includes many important details from text	4 - Includes most important details and key language or vocabulary from text
Topics or Characters	1 - Refers to 1 or 2 characters or topics using pronouns (he, she, it, they)	2 - Refers to 1 or 2 characters or topics by generic name (boy, girl, dog)	3 - Refers to many characters or topics by name in text (Giant, Monkey, Ben, Otter)	4 - Refers to all characters or topics by specific name (Old Ben Bailey, green turtle)
Interpretation	1 - Responds with incorrect information	2 - Responds with some misinterpretation	3 - Responds with literal interpretation	4 - Responds with interpretation that reflects higher-level thinking
Degree of response	Provides limited or no response to teacher questions and prompts	2 - Provides some response to teacher questions and prompts	3 - Provides adequate response to teacher questions and prompts	4 - Provides insightful response to teacher questions and prompts
Degree of Prompts	1 - Requires many questions or prompts	2 - Requires 4-5 questions or prompts	3 - Requires 2-3 questions or prompts	4 - Requires 1 or no questions or prompts

The **DRA K-3 Continuum** is a rubric that defines four progressive stages of reading development: Emergent Readers, Early Readers, Transitional Readers, and Extending Readers. The rubric is defined under each reading stage by criteria on: Book Selection and Sustained Reading, Previewing and Predicting, Oral Reading and Use of Strategies, and Comprehension. The DRA K-3 Stage of Reading is a composite of all reading elements previously identified as critical components for labeling a particular level of reading development.

NOTES:			

D. DESCRIPTION (Narrative Overview of Test): DRA K-3

TEST / SUBTEST NAME: DRA K-3 Stage of Reading Development - Independent reading Level

This test assesses:

The primary purpose of the DRA is to identify a student's Reading Stage of Development (i.e., Emergent Reader, Early Reader, Transitional Reader, or Extending Reader) through the measurement of critical components of accuracy, fluency, and comprehension. The DRA is designed to: 1) measure how well students read, 2) monitor their reading growth and development, and 3) provide teachers with information that can be used to tailor reading instruction for each student.

Assessment administration looks like:

The assessment is a one-on-one teacher-student conference that takes about 10 to 20 minutes per student to administer, depending on the student's reading level and the teacher's expertise with the administration and scoring procedures. For students at levels A, 1, or 2, the teacher selects an assessment text and reads one or two pages to the student. The student then points and reads the remainder of the story while the teacher records the student's miscues.

For students above level 2, the student chooses a text from a small range of appropriate assessment texts selected by the teacher. The teacher asks the student to tell what is happening in the text based on either a review of the illustrations (for lower level readers) or from reading the beginning paragraphs aloud.

Students at levels 3 to 16 then read the complete text aloud while the teacher takes a record of oral reading. The student then retells the story.

Students at levels 18-44 give their prediction about what might happen in the story, then read the rest of the book silently in another quiet location. The student later retells the story and responds to scripted teacher questions. The student then reads a selected portion of the text aloud while the teacher records a record of oral reading. The teacher concludes the session by asking the student scripted questions about his or her reading preferences.

What is the response format?

The teacher records the student's reading behaviors on a DRA Observation Guide. Depending on the Stage of Reading Development, student behaviors could entail appropriately selecting assessment texts (from a small range of texts identified by the teacher), oral reading, predicting the story, using problem-solving reading strategies, interpreting outcomes, and responding to teacher questions.

E. DEVELOPMENT

Initial Development:

Joetta Beaver (from Upper Arlington City School District in Ohio), collaborated with other teachers and educators in Upper Arlington to begin the development of this assessment in response to "A Nation at Risk" in 1986. The Reading Assessment Development Committee wanted an assessment that could be used with all students in kindergarten through grade three to document changes in a student's reading skills over time. The Committee felt that an assessment administered and interpreted by teachers would increase the validity of instructional decisions based on test results.

In 1988, the initial pilot version of the DRA was approved by the Ohio Department of Education.

In 1994, a set of criteria were written to initially determine the level of difficulty of the assessment texts. These criteria are: inclusion of repetitive language; story structure; literary features; story appeal, concepts, vocabulary, experiences common to the majority of students; level of picture support; and text size, layout, and number of lines on a page and words within a text.

In 1996, the first large scale, formal field-testing of the DRA was conducted. This field study consisted of 84 teachers who had been trained previously in conducting miscue analysis and were considered experts in the administration of this type of assessment. The teachers were from across the US and one province in Canada. The specific states/provinces represented were AZ, CA, CO, FL, IW, IO, MA,MN, OH, TX, and Ontario. Teachers administered the DRA to 346 students in grades K-3 (K-25%; Grade 1-47%; Grade 2-25%; Grade3-3%) Race/ethnicity was represented as: Caucasian – 67%; Other – 33%. Gender was represented with 44% males, 41% females, and 15% unidentified. As a part of the field testing, teachers were asked to respond to questions about the assessment texts and related to appropriateness of the story content, illustrations, order of difficulty, story appeal, and grade level. Further study, revisions, additions, and deletions of texts were made in response to the teacher feedback.

The set of alternate assessment text forms were developed in 1999. Nonfiction assessment texts were added to the end of each grade level. Familiarity with the content was a strong consideration in the selection of the informational texts. Texts were field-tested and revised, as appropriate, in 2000. Eighteen states and two Canadian Provinces participated in the field-testing of the Alternate texts. Each teacher was asked to administer both the DRA Original and Alternate texts, in counterbalanced order, during a one-week interval. The sample consisted of a total of 208 students, K-3, with 20% in K, 49% in grade1, 22% in grade 2,and 9% in grade 3. The race/ethnicity distribution of the sample was 63% Caucasian and 37% Other. The states represented were AZ, CA, CT, FL, IL, KS, LA, MA, MD, MI, NV, OH, PA, TX, VA, VE, WA. Another small follow-up study was conducted (n=95 students) to verify the accuracy of the revisions made as a result of the field study.

The most recent revisions made to the DRA were completed in 2001 and 2002. The revisions consisted of providing more concrete guidance and scripting to the directions for administration, revising the illustrations to be more current and culturally diverse, refining the comprehension rubric, and the completion of a technical manual that details the relevant data and other information collected across the development, field testing, and validation phases and combines it into one easily accessible document.

Currently, the DRA has been expanded to grades 4 through 8 with a major series of nine studies in progress to provide technical reliability and validity information and potentially involving over 3000 students. In addition, new studies on DRA K-3 will be embedded into the DRA 4-8 plans to obtain additional data on the reliability and validity of DRA K-3. The final outcome of these studies will result in a revised DRA K-8 technical manual to support the appropriate use of the DRA instrument.

Dates:

1986-2002

Re-normed:

The DRA is a criterion-referenced test and questions on this form related to norming characteristics do not apply. However, several studies, reported above and throughout this report, have been conducted to document the reliability and validity of the DRA for students across the United States in grades K-3. These studies have verified the validity of the ordering of the assessment texts by difficulty in a manner that is somewhat similar to a norming study that would be designed to collect data for scale development in a norm-referenced assessment.

Complete one technical adequacy sheet for each subtest of the measure.

SKILL AREA/SUBTEST: DRA K-3: Stage of Reading Development – Independent Reading Level

VALIDITY

Type of Validity				Coef	ficient	
	Age or Grade	Test or Criterion	n (range)	range	median	Information (including normative data)
Concurrent	Grades 1-3	DRA Reading Level and Students At Risk of Retention	1,101	See Info	_	In the spring of 1999, Austin Independent School District began an evaluation of a 20-day summer school program. The program served students from 52 elementary schools and two private schools. Teachers and principals recommended students to the program. The students were selected to participate because they were judged to be at-risk-of-retention or below grade level in literacy skills. The ethnicity of the participants was diverse with 55% Hispanic, 30% African American, 14% Anglo/Other and 1% Asian. The gender was balanced at 57% male and 43% female. The grade level distribution was 24% grade 1, 44% grade 2, and 32% grade 3. The DRA assessed the accuracy of the selection decisions at the beginning of the program. Although reading level information by grade level was not provided in the report ¹ , an overall calculation of the initial reading levels compared to the actual number of students by grade level shows a high level of correspondence between teacher selection and student reading stages. Students who attended were completing the grade levels indicated: Grade 1 = 375; Grade 2 = 487; Grade 3 = 359. By the end of grade 1, students are expected to be reading independently at or above the DRA Reading Level of 16 or higher which is equivalent to a Transitional Reader Stage or higher. Of the 1101 students whose pretest scores were presented in the report, 815 or 74% were categorized to be in the Emergent or Early Reading Stages. These scores represent accurate selection decisions. Forty-four or 4% of the students were, most likely, incorrectly selected to participate. It is difficult to determine the accuracy of the 2% (242/1101) of students initially categorized as Transitional readers without the actual raw data indicating individual Reading Stage by Grade Level. ¹

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¹ Summer Opportunity To Accelerate Reading 1999 Study. ED 435 641

Appendix E

Convergent	Grades 1-3	DRA Independent Reading Level and the lowa Test of Basic Skills, Reading Comprehension Grade Equivalent Score	284	.54 to .83	.65	The study sought to examine the extent to which student performance on the DRA (Independent Reading Level) is predictive of student performance on the reading comprehension subtest of the lowa Test of Basic Skills (ITBS). Scores (grade-equivalents) were collected from 97 first graders, 101 second graders, and 102 third graders across 4 elementary schools. The data were analyzed to calculate the Spearman Rho rank order correlation coefficient. The total correlation across grades 1 to 3 for the DRA Reading Level and the ITBS was .83. At each grade level: 1st = .65; 2nd = .84; 3rd = .54; total sample = .83. All correlations were statistically significant at p< .001. The use of the grade-equivalent in the analysis may have restricted the range of the correlation coeffcient.
Convergent	Grades 1-3	DRA Reading Level change after SOAR	780 –1999 388 –1998	91%	-	Ninety-one percent of students who attended the 4-week Summer School program in 1999 made gains of one or more reading levels. In 1998, 89% of the students achieved gains in reading level. Ninety-one percent of students who began the program at the lowest reading level advanced to a higher reading level by the end of the program. Overall, there was a decreasing number of students in the Emergent and Early Stages and an increasing number of students in the Transitional and Extending stages.

Complete one technical adequacy sheet for each subtest of the measure.

SKILL AREA/SUBTEST: DRA K-3: Stage of Reading Development – Independent Reading Level

VALIDITY

Type of				Coef	ficient	
Validity	Age or Grade	Test or Criterion	n (range)			Information (including normative data)
Construct	Grade 2	DRA Instructional Reading level and scores on the lowa Test of Basic Skills	2470	.675- .708	675	DRA Independent Reading Level scores of 2,470 2 nd grade students from one large urban school district at the end of the 1998-1999 school year were correlated with results of lowa Test of Basic Skills (ITBS) norm-referenced test, administered at beginning of the 3 rd grade school year. ITBS reading comprehension, vocabulary, and total reading scores were obtained and analyzed. All correlations were significant at p < .01 using the Spearman Rho rank order correlation coefficient. The correlation between DRA and Reading Comprehension was .675, with vocabulary, .675 and with Total Reading, .708.
Construct	Grades 2-3	Lexile scores	259	.69		An analysis was completed to determine the relationship between the DRA Independent Reading Level and the Lexile Scale. The range of levels of Assessment Texts with data was from Level 9 to Level 30. The correlation coefficient of .69 was most likely negatively affected by range restriction.
Content	Grades K-3	DRA K-3				Content Validity was built into the DRA K-3 assessments during the development process. All tests are authentic, and the student is asked to respond to the text in ways that are appropriate for the genre. Classroom teachers selected and reviewed texts, wrote and reviewed the Observation Guides, and developed the scoring and interpreting protocols. Teacher judgment was used as a part of a field study to obtain agreement with statements concerning the assessment qualities.

Manual cites other published validity studies:

X yes

🗖 no

Lipson,M., Biggam, S., Connor, D., & Mekkelsen, J., (1999) DRA Validity Study. Vermont Department of Education and the University of Vermont. Williams, E.J. & Rogers, E. (1999, March) The Development of an Authentic Reading Assessment for Children in the Primary Grades. Paper presented at the American Association of Educational Research, Chicago, Illinois.

SKILL AREA/SUBTEST: DRA K-3: Stage of Reading Development – Independent Reading Level

RELIABILITY

Type of			Coef	ficient	SEM	Information (including normative data)	
Reliability	Age or Grade	n (range)	Range	Median			
Test/Retest	1-3	306	.92 to .99	.98	-	The DRA was administered twice to the same students with an interval of 3 weeks between administrations. The sample of teachers represented 21 first grade teachers, 24 second grade teachers, and 23 third grade teachers across four elementary schools. The sample of students represented: 104 first grade students, 104 second graders, and 102 third graders. All coefficients were statistically significant at p<.001.	
Inter Rater	К-3	306	.80		-	For one of the studies completed, a national sample of students (K-3; n=306) were assessed (and audio taped) in their classroom during the last 6 weeks of the school year Overall, students read assessments ranging from Level A through Level 44. The audio tapes were then randomly assigned within grade ranges and sent, blindly, to a second rater. A rating scale analysis was completed on the collected data to capture multiple facets of the reading process and their interdependencies. Raters, students, text readin levels, and items were identified as the facets in the rating scale model. Items included teachers' rating scale responses for students' rate of accuracy, level of understanding, reading stage, phrasing, and reading rate. The overall sample of students were representatives of 10 states, 52% (159) were boys, 41% (124) were girls, and 7% (8) we not identified. The representation across grade levels was: K-11% (33); First – 41% (125); Second – 24% (72); other – 2% (8).	
Inter Rater	K-3	306	.74		-	As an addendum to the above study, a third rater was asked to score the audio taped DRA assessment. Again, the taped assessments were randomly assigned to raters. The Rasch Rating Scale Analysis was again calculated, resulting in a .74 reliability coefficient.	
Internal Consistency	K-3	306	.98		-	In the same study, Cronbach's Alpha was calculated for the five rating scale items.	

SKILL AREA/SUBTEST: DRA K-3: Stage of Reading Development – Independent Reading Level

RELIABILITY

Type of			Coeff	icient	SEM	Information (including normative data)
Reliability	Age or Grade	n (range)	Range	Median		
Internal Consistency	K-3	306	.97			In the same study as above, Cronbach's Alpha was calculated across the DRA Assessment Texts(I .e., text separation reliability)
Inter Rater Agreement	К-3	n= 11 X 4 teachers by students	80% - 100%	96%		Ten teachers sat behind a one-way mirror in an observation room while a DRA expert administered the DRA to four students with varying reading levels. All ratings were completed independently. Each student was exposed to and scored on three different levels of reading assessment texts. The results obtained ranged from 80% agreement to 100% agreement, with the highest agreement ratings on the lower level texts. The complete set of agreement ratings are displayed in the table below.**

**Regulte	Obtained	From	Inter	Observer	Agreement
. izeanita	Ontailicu	TIOIII.	mici	OUSCLVCL.	Agreement

Student	Level	Expert	1	2	3	4	5	6	7	8	9	10
A	A	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
A	1	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%
A	2	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%
A	3	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
В	4	91%	91%	89%	87%	91%	89%	89%	91%	89%	91%	89%
В	6	88%	88%	88%	83%	88%	86%	88%	86%	88%	86%	88%
В	8	83%	87%	81%	86%	80%	81%	84%	86%	81%	84%	85%
C	18	96%	97%	96%	96%	97%	96%	98%	98%	96%	98%	96%
C	24	97%	96%	96%	95%	97%	97%	97%	97%	96%	96%	95%
C	28	89%	89%	91%	90%	89%	90%	91%	90%	91%	90%	90%
D	40	100%	100%	99%	100%	100%	99%	99%	99%	99%	100%	100%
D	44	99%	100%	99%	99%	99%	99%	100%	99%	99%	98%	99%

Weber, W.A. DRA, A Validation Study, University of Houston, 2000

Outcome Measures

Complete this section for outcome measures. Complete one copy of this sheet for each subtest, if process for operationalizing improvement differs by subtest.

Outcome Measure: Assessment for the purpose of classifying students in terms of whether or not they achieved grade level performance or improved.

SKILL AREA/SUBTEST: DRA K-3: Stage of Reading Development - Independent Reading Level

INDEXING SIGNIFICANT GAINS

(Criterion-referenced)

Improvement is operationalized as:

Change in Stage of Reading Development

A student may demonstrate significant improvement in reading achievement when there is upward movement on the DRA Continuum of the Stages of Reading Development. The four Stages are defined by a rubric as Emergent Reader, Early Reader, Transitional Reader, and Extending Reader. There are two reading skill levels within each Stage. The components of the rubric include reading comprehension, fluency, and accuracy, measured under the headings of: Book Selection and Sustained Reading, Previewing and Predicting, Oral Reading and Use of Problem Solving Strategies, and Comprehension.

Book Selection and Sustained Reading

There are two levels within each Stage

Emergent Readers:

Scores an Accuracy Rate of 90% or below on DRA text levels A-1 Scores an Accuracy Rate of 90% or above on DRA text levels A-2

Early Readers:

Scores an Accuracy Rate of 94% or above on DRA text levels 3-6 Scores an Accuracy Rate of 94% or above on DRA text levels 8-10

Transitional Readers:

Scores an Accuracy Rate of 94% or above on DRA text levels 12-16 Scores an Accuracy Rate of 94% or above on DRA text levels 18-24

Extending Readers

Scores an Accuracy Rate of 94% or above on DRA text levels 28-34 Scores an Accuracy Rate of 94% or above on DRA text levels 38-44

This quantitative standard, 90% or 94% at a particular text level, is considered along with other observable criteria that increase in skill requirements and combine with the numerical score to represent a comprehensive evaluation of that rubric category.

Comprehension

Emergent Readers: Comprehension Not Measured

Early Readers: Score of 6 to 9 points on Comprehension Rubric Transitional Readers: Score of 10 to 15 points on Comprehension Rubric Extending Readers: Score of 16 to 21 points on Comprehension Rubric

Previewing and Predicting

There are two levels within each Stage and each level contains two observable criteria. The criteria require increasingly more difficult previewing and predicting skill levels as the Stage increases. For example, a criterion for Early Readers includes *Gathers limited information from the teacher's introductions and pictures* and progresses to the criterion at the Extending Reader's Level of *Gathers pertinent information from teachers introduction, paragraphs, read alouds, and self-initiated previews.*

Oral Reading and Use of Problem Solving Strategies

Four criteria are presented for evaluation on this rubric component. The criteria require increasingly more difficult oral reading and problem solving skill levels as the Stage increases. There are two levels within each Stage. For example, for the lowest Early Reader Stage, one criterion states: *At difficulty, stops, relying on support to problem-solve unknown words.* And for the lowest level for the Transitional Reader, the same criterion reads: *At difficulty, uses 1 to 2 cues to problem solve unknown words.* The combination of these criteria contained in the rubric serve to identify a student's strengths and weaknesses as well as to define the Stage of Reading Development.

Change in Independent Reading Level

A student may also demonstrate improvement by reading at a higher Independent Reading Level within a Reading Stage. An Independent Reading Level is achieved when a student meets the identified standards of accuracy, fluency, and comprehension. The Accuracy rate must be calculated at 94% or greater (above the Emergent Reader Stage); the fluency must be judged to be at a moderate rate; and comprehension needs to be at a score of 16 or higher.

INDEXING GRADE-LEVEL PERFORMANCE

Grade-level performance is operationally defined at an Independent Reading Level Or, more specifically,

as: meeting specific criteria for Accuracy, Fluency, and Comprehension on designated Assessment Texts to indicate an Independent Reading Level.

The DRA K-3 is a Criterion-Referenced Assessment.

'Grade Level Performance' is typically calculated as a derived score on a norm – referenced, standardized assessment. Although noted as one of the most inaccurate and misrepresented score types, the 'grade-equivalent' score is commonly used to identify whether or not a student is reading at, above, or below grade level.

The DRA is a criterion-referenced assessment that indexes a student's reading level along a continuum of reading development rather than along an age or grade continuum.

The DRA model moves outside of the grade - level model. It was designed to measure a student's Stage of Reading Development, as well as to identify strengths and weaknesses within that Stage that need to be addressed instructionally to promote growth to a higher Stage. When the DRA was conceptualized by teachers, there was a firm understanding that a student's grade level placement was not an accurate indication of achievement or skill level. The DRA was designed with the practical intent of measuring a diverse range of students in any one classroom. With the information obtained through the assessment, a teacher would be prepared to begin instruction at each individual's skill level, providing targeted practice and subsequent measure along a growth continuum.

To facilitate communication with test users who 'require' a grade level type of score, the DRA authors grouped the assessment texts by approximate grade levels so that the designation of a student's Independent Reading Level could also be identified as grade level performance, if desired.

GENERAL ON-GRADE LEVEL PERFORMANCE BY STAGE OF READING DEVELOPMENT

If a student meets the criteria for an Independent Reading Level which includes the reading of the following assessment texts at the beginning of the school year,	Then, the student can be said to be reading 'on-grade level' for grade:	If a student meets the criteria for an Independent Reading Level which includes the reading of the following assessment texts at the end of the school year,	Then, the student can be said to be reading' on-grade level' for grade:
A-1	к	A-2	к
3-6	1	8-10	1
12-16	2	18-24	2
28-34	3	34-44	3

More precise grade level designations can also be used if a test user is looking for a 'grade level score' that is indicative of the 'end of year reading achievement' (such as 2.9 or 1.9 on norm-referenced tests). These designations are somewhat dependent on the skill level alignment with the local standards. A district in Austin, Texas, considering alignment with a new set of State Standards and a new standardized assessment, TAKS, to measure standard attainment, identified end-of-year, on grade level proficiency as

Grade Level	End of Year On-Grade Level Proficiency
K	2
1	16
2	28
3	38

An example of another District's designation of reading proficiencies by Grade Level is illustrated below and on page 41 of the DRA K-3 Teacher Resource Guide. The authors recommend that a district establish performance levels of proficiency that are in line with local standards. The specific sample district is not identified in the example.

Sample District Reading Proficiency Ratings

Grade Level	Time of Year	Reading Proficiency Standards
К	October/November	Reading Level A
	May/June	Reading Levels 1-2
1	October/November	Reading Levels 3-6 at 94% accuracy or above with adequate ² understanding
	May/June	Reading Levels16-18 at 94% accuracy or above with adequate understanding
2	October/November	Reading Levels 18-20 at 94% accuracy or above with adequate understanding
	May/June	Reading Levels 24-28 at 94% accuracy or above with adequate understanding
3	October/November	Reading Levels 28-30 at 94% accuracy or above with adequate understanding
	May/June	Reading Levels 34-38 at 94% accuracy or above with adequate understanding

^{2 &#}x27;Adequate Understanding' is defined in the DRA Stages of Reading Development Rubric

On page 36 of the DRA K-3 Teacher Resource Guide, grade level designations are indicated to support the administration of the DRA, given prior year's performance:

For Assessment in Grade		Prior Year Performance	DRA Text Level Range to Use for Assessment
1	K	On Grade Level	1-4
	K	Below Grade Level	Α
	K	Above Grade Level	8-16
2	1	On Grade Level	16-20
	1	Below Grade Level	6-14
-	1	Above Grade Level	28-34
3	2	On Grade Level	28-34
	2	Below Grade Level	12-20
	2	Above Grade Level	34-44

Screening Measures

Complete this section for screening measures. Complete one sheet for each subtest.

Screening Measure: Brief assessment that focuses on critical reading skills strongly predictive of future reading growth and development, and conducted at the beginning of the school year with all children in grades K, 1, 2, and 3 to identify children likely to need extra or alternative forms of instruction.

DECISION-MAKING UTILITY:

The DRA K-3 was <u>not designed to be used</u> as a screening measure, as operationally defined above. The DRA, however, can be administered at the beginning of the school year (or at anytime when there is no prior information about a student's reading level) in grades K,1, 2 and 3 to identify children likely to need extra or alternative instruction. In addition, during the assessment, the DRA will provide information that is likely to guide the alternative instruction, unlike many broad sweeping screening instruments that are designed to merely indicate a need for further testing. The DRA is focused on measuring current reading skills in a way that is meaningful to the teacher and to the forthcoming instruction.

EVIDENCE OF SPECIFICITY:

How are false negatives and false positives assessed? (Criterion and grade/age)

	Negative	Positive
False		
True		

EVIDENCE OF SENSITIVITY

Odds ratios and conditional probabilities if given

Calculations:

Specificity: TN / (TN + FP) =Sensitivity: TP / (TP + FN) =Hit rate: (TP + TN) / N =

Diagnostic Measures

Complete this section for diagnostic measures.

Diagnostic Measure: Assessment conducted at any time during the school year when more in-depth analysis of a student's strengths and weaknesses is needed to guide instruction.

1. Check areas for which diagnostic information is provided.

	Some Information about Domain	No Information about Domain
Phonemic Awareness		Х
Letter Names	Х	
Letter Sounds		Х
Word Attack	Х	
Word Identification	Х	
Reading Fluency	x	
Listening Comprehension		Х
Reading Comprehension	х	
Vocabulary		Х
Other Accuracy	х	

If information is provided at a skill or strategy level, please specify below:

At the Emergent Reader Level, information on: Directionality, One-To-One Matching, Monitoring, Concept of Letters and Words, and Use of Cue Sources is collected. Accuracy rate is calculated as the percent of miscues.

The table above allows for the rater to mark categories when <u>SOME</u> information is provided. However, the depth of the information provided on Word Attack, Letter Names, and Word Identification at the Emergent Reader Level would not be sufficient to diagnose specific instructional weaknesses.

At the Early, Transitional, and Extending Reader Stages, information is collected on Previewing and Predicting, Oral Reading and Problem Solving Strategies, Percent of Miscues, Phrasing and Fluency, Intonation, Self Analysis of Miscues, and Comprehension. Specific comprehension skills are examined on Retelling Criteria and on classifications of Literal and Inferential Interpretation.

NOTE: Although information in the skill areas checked above is available in a DRA rating, the DRA was designed to assess a student's Stage of Reading Development at an Independent Reading Level. The analyses that were calculated to assess the reliability and validity of the assessment were done for the holistic concept of Reading Stage as opposed to examining the stand-alone, unique sub-skill features.

Diagnostic Measures

Complete items 2, 3, and 4 for each skill area or subtest.

2. Evidence for correspondence with criterion measures:

Rasch (facet) rating scale analyses were employed to capture the multiple facets of the reading process and their interdependencies. The raters (n=2,3), students (n=306), text reading levels (n=19), and items (n=5) identified the facets. Items included rating scale responses indicated by teachers for students' rate of accuracy, level of understanding (comprehension), reading stage, phrasing, and reading rate. The rating scale responses to the items are the results of the interactions between facets. The consistency across two raters showed a correlation of .80 when calculated across students, text levels, and items. For n=3 raters, the correlation was .74.

3. Evidence for reliability:

Again, the DRA was tested for reliability in a holistic fashion, using the components of accuracy, comprehension, and fluency ratings to contribute to the general DRA reading 'score'. Although instructional information on these individual components could be culled from the teacher's rating of the student on the Observation Guide, the information is not extensive or 'in-depth', although <u>sufficient</u> for deriving an accurate reading 'score' which is the purpose of the test.

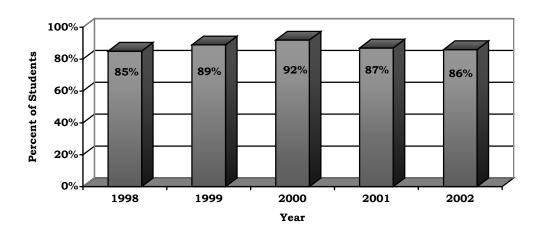
The justification for the absence of evidence for the separate sub-skills is the same as that used when conducting a statistical analysis such as a Multivariate Analysis of Variance (MANOVA). Once the interaction effects show statistical significance, further analyses on the individual main effects are no longer done.

Reliability Type	Coefficient/s
Test-Retest	.92 to .99
Inter-rater Agreement	.80
Inter-rater Agreement	.74
Internal Consistency	.98
Internal Consistency	.97
Inter-rater Agreement	80% to 100%

4. Evidence for improved instruction or learning:

The Longitudinal Study of the Summer Opportunity to Accelerate Reading program, conducted in the Austin Independent School District, provides 5 years of evidence for improved instruction measured by the DRA. The figure below shows the percentage of students who made a gain in text reading level during the Summer Opportunity Accelerate Reading (SOAR) program in 1998 through 2002. The data do not represent cohorts of students.

Percentage of Students Making a Gain in DRA Text Reading Level During SOAR 1998 through 2002*



* Summer Opportunity to Accelerate Reading (SOAR) Evaluation, 2002. Austin Independent School District. Office of Program Evaluation, October, 2002

An example of the data presented in the report are shown below:

Of the 55,322 second graders assessed:

17,937 or 32.42% were reading <u>below</u> grade level 17,507 or 31.65% were reading <u>on</u> grade level 19,878 or 35.93% were reading <u>above</u> grade level

In summary, 37,385 or 67.58% of the second graders who were assessed across the State were reading on or above grade level as compared to:

65.56% in the Fall of 2000, 62.98% in the Fall of 1999, and 43.64% in the Fall of 1998

The criteria for indicating performance in Louisiana were aligned with the State standards for improvement.

Progress Monitoring Measures

Complete this section for progress monitoring measures.

Progress Monitoring Measure: Assessment conducted a minimum of three times a year or an a routine basis (i.e. weekly, monthly, or quarterly) using comparable and multiple test forms to (a) estimate rates of reading improvement, (b) identify children who are not demonstrating adequate progress and therefore require additional or alternative forms of instruction and / or (c) to compare the efficacy of different forms of instruction for struggling readers and thereby design more effective, individualized instructional programs for those at-risk learners.

Recommended Administration Period: Fall, Winter, Spring of School Year					
Test / Subtest Name:	Administration Period:				
DRA K-3	10-20 minutes				
Recommended Frequency of Data Collection					
For At-Risk Students: 3 or more times per year					
For Others: 3 or more times per year, dependent	nding on the program, achievement level, etc.				
Does the measurement construct remain constant over the	e school year? X yes 🔾 no				
Criterion for Adequate Growth: X Specified	☐ Not specified				
For a student who is on grade level at the end of kindergarten to remain on grade level, he or she would need to gain: • Eight levels by the end of first grade; • Four more levels by the end of second grade, and • Three more levels by the end of third grade					
Test / Subtest /Component Name: Accuracy					
Criterion for Adequate Performance: X Specified Not specified					
Adequate performance for Accuracy for Emergent Readers is indicated by a score of no more than a 10% miscue rate on Assessment Texts A, 1, and 2. Adequate performance for Early, Transitional, and					

Adequate performance for Accuracy for Emergent Readers is indicated by a score of no more than a 10% miscue rate on Assessment Texts A, 1, and 2. Adequate performance for Early, Transitional, and Extending Readers is indicated with a score of no more than 6% miscue rate on Levels 3, 4, 6, 8, 10, 12, 14, and 16; Levels 18, 20, 24, and 28; and Levels 30, 34 and 38, respectively. Adequate Performance at the end of the school year, specifically, can be more precisely defined with the above criteria within the designated Stage, using levels 2, 16, 28, and 38, respectively.

Test / Subtest/Component Name: Fluency

Criterion for Adequate Performance: X Specified
Not specified

Four criteria define fluency and are rated on the Observation Guide, beginning with the end of the first grade.

Adequate Performance is then related to the Stage of Reading Development. To reach an Independent Reading

Level on an Assessment Text, the student must exhibit a moderate rate of fluency on all four criteria. Moderate

ratings can be defined on each of the rating scales as:

Phrasing – reads orally in longer phrases most of the time; adequate rate

Intonation – adjusts intonation to convey meaning; attends to punctuation

Problem Solving Skills - At difficulty, student problem solves using re-reading

Analysis of miscues and self-direction – Miscues interfere with reading sometimes; Student self-corrects most significant miscues

Test / Subtest/Component Name: Comprehension

Adequate Comprehension is defined on the Comprehension Rubric by a score range of 16 o 21.

The elements of comprehension that are identified as adequate performance are:

Tells many events in sequence

Includes many important details from text

Refers to many characters or topics by name in the text

Responds with literal interpretation

Provides adequate response to teacher questions and prompts

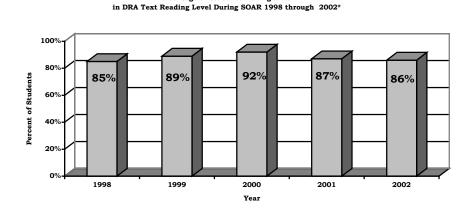
Requires 2 to 3 questions or prompts

Number of Data Points Needed To Make Reliable Decision: 3

4. Evidence for improved instruction or learning:

The Longitudinal Study of the Summer Opportunity to Accelerate Reading program, conducted in the Austin Independent School District, provides 5 years of evidence for improved instruction measured by the DRA. The figure below shows the percentage of students who made a gain in text reading level during the Summer Opportunity Accelerate Reading (SOAR) program in 1998 through 2002.

Percentage of Students Making a Gain



^{*} Summer Opportunity to Accelerate Reading (SOAR) Evaluation, 2002. Austin Independent School District. Office

Another rich source of data showing evidence of improvement comes from the Louisiana K-3 Reading and Math Initiative Reports. In 1998, the Board of Elementary and Secondary Education approved the Developmental Reading Assessment as the uniform assessment to be implemented statewide. The yearly achievement reports produced are available at the State Department of Louisiana and document a number of years of student progress using the DRA (1998 to 2002). In the 2001-2002 Progress Report of Second and Third Graders' Reading Abilities, December, 2001, there are 140 pages of performance data. The Summary of Findings, located in the front of the report, shows overall improvement data by grade level and year for the State. Individual Parish improvement data can be accessed by comparing reports of the Parishes across separate yearly reports.

An example of the data presented in the report are shown below:

Of the 55,322 second graders assessed:

```
17,937 or 32.42% were reading <u>below</u> grade level 17,507 or 31.65% were reading <u>on</u> grade level 19,878 or 35.93% were reading <u>above</u> grade level
```

In summary, 37,385 or 67.58% of the second graders who were assessed across the State were reading on or above grade level as compared to:

```
65.56% in the Fall of 2000,
62.98% in the Fall of 1999, and
43.64% in the Fall of 1998
```

The criteria for indicating performance in Louisiana were aligned with the State standards for improvement.

Evidence for Sensitivity to Growth (Describe research showing relation between growth on this measure with growth on other measures):

DRA Independent Level scores of 2,470 2nd grade students from one large urban school district at the end of the 1998-1999 school year were correlated with scores (Normal Curve Equivalents) of Iowa Test of Basic Skills (ITBS) norm-referenced test, administered at beginning of the 3rd grade school year. ITBS reading comprehension, vocabulary, and total reading scores were obtained and analyzed. All correlations were significant at p < .01 using the Spearman Rho rank order correlation coefficient. The correlation between the DRA Independent Reading Level and the ITBS Reading Comprehension score was .675, with vocabulary, .675 and with Total Reading, .708.

Another study sought to examine the extent to which student performance on the DRA (Independent Reading Level) is predictive of student performance on the reading comprehension subtest of the Iowa Test of Basic Skills (ITBS). Scores (grade-equivalents) were collected from 97 first graders, 101 second graders, and 102 third graders across 4 elementary schools. The data were analyzed using the Spearman Rho rank order correlation coefficient. The total correlation across grades 1 to 3 for the DRA Independent Reading Level and the ITBS was .83. At each grade level: 1^{st} = .65; 2^{nd} = .84; 3^{rd} = .54; total sample = .83. All correlations were statistically significant at p< .001. The use of the grade-equivalent in the analysis may have restricted the ranges of the correlation coefficients.

Evidence for Sensitivity to Treatment Effects (Describe research showing that treatment effects are revealed with this repeated measurement):

To our knowledge, there have been no experimental studies conducted using the DRA to measure treatment effects.

NOTES:		

Acquisition Information

ACQUISITION INFORMATION

Where to Obtain: Celebration Press

Address: 299 Jefferson Road

Post Office Box 480 Parsippany, NJ

07054-0480

Phone #: 1-800-321-3106

Web Site: www.pearsonlearning.com

Cost:

Complete Kit (describe contents) - \$116.50 DRA K-3 Assessment Package includes a Teacher Resource Guide, 20 benchmark books, reproducible assessment forms, and file folders to organize materials.

Manuals and Test Materials – Technical Manual is free upon request. Test materials are included in the price of the assessment package.

Directions for Administration – Included in the assessment package.

Test Forms - Alternate Form - \$116.50

Technical Manuals - Technical Manual is free upon request.

Protocol per Student - N/A

Other (Describe below)

For \$225.95 there is a DRA Training video Package. The package includes a comprehensive 2.5 hour video for training and review to assure standardized implementation of the assessment.

DRA On-Line Management System
The comprehensive on-line management system is
available to manage individual student data per
classroom teacher use in guiding instruction, progress
monitoring reports for schools, district and state
administrators for accountability purposes, and eight
customizable fields for disaggregating data in
Compliance with Reading First requirements.

- can purchase replacement components individually
- information not available
- K materials not consumable, so NA

Level IV Review: Summary

A. PURPOSES

The primary purpose of the DRA is to identify a student's Reading Stage of Development (i.e., Emergent Reader, Early Reader, Transitional Reader, or Extending Reader) through the measurement of critical components of accuracy, fluency, and comprehension. The DRA is designed to: 1) measure how well students read, 2) monitor their reading growth and development, and 3) provide teachers with information that can be used to tailor instruction for each student.

1. STRENGTHS

The DRA is one of the few valid and reliable assessments that has been designed for use by the classroom teacher. The instrument complements the classroom structure in a way that encourages the teacher to integrate its use into the classroom routine. Teachers view the DRA as a tool that provides valuable information to support their planning in the classroom rather than as an imposition on instructional time during administration and of limited instructional value.

2. WEAKNESSES

For a teacher to have a comprehensive understanding of a student's skill level on all of the critical components of reading, the DRA needs to be bundled with other assessments that target such areas as phonemic awareness and phonics. Information about the availability of other complementary instruments and effective ways to coordinate their administration with the DRA would provide an important resource to teachers.

B. RECOMMENDATIONS

Support the use of the DRA in third party evaluations of reading achievement that are empirically designed to isolate treatment effects.